REMARKS

N.B. The Examiner did not approve (or disapprove) the Proposed Drawing Correction filed on March 24, 2003. Thus, Applicant encloses a REPLACEMENT FORMAL DRAWING SHEET on which Fig. 1 and Fig. 2 have been labeled as "PRIOR ART" and on which the reference numeral "7" has been added in Fig. 1. Thus, Applicant respectfully requests the Examiner to **accept this corrected formal drawing sheet as the formal drawing for the application**.

Claims 1-16 are all the claims pending in the application.

Applicant amends the claims for clarity of language and format. These amendments do not narrow the scope of the claims – no estoppel is created.

The Examiner rejects claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over Dodd in view Ishii. Applicant respectfully traverses this rejection as follows.

Applicant's claimed invention provides satellite signal transmitting and receiving methods which comprise unique combinations of method steps. Also, Applicant's claimed invention provides satellites comprising unique combinations of features. Some of the unique combinations of method steps and features include, *inter alia*, offsetting signals by at least one chip of the spread spectrum modulation (claim 1; see also claims 2, 6 and 10). Other combinations include, *inter alia*, spread spectrum modulating, using different sequences, signals to be transmitted (claim 5; see also claim 11).

The Examiner acknowledges that Dodd does not disclose at least the above-noted method steps and features of Applicant's claimed invention. In fact, instead of offsetting the signals, or

spread spectrum modulating, using different frequencies, signals to be transmitted, Dodd deals with nulls created by oppositely facing antennas on a spacecraft by introducing a phase shift (by means of a phase shifter 34) to eliminate the nulls (see Id., col. 3, line 31 through col. 4, line 43). Thus, not only does Dodd fail to disclose the above-noted method steps and features of Applicant's claimed invention (as acknowledged by the Examiner), Dodd teaches away from such an implementation. Accordingly, it is improper for the Examiner to conclude that, it would have been obvious to one skilled in the art "to make the Dodd adapt to include" the above-noted method steps and features of Applicant's claimed invention, because such an adaptation would eliminate the need for inducing a phase shift; thereby, in essence, changing the principle of operation of Dodd. *See* MPEP §2141.02 (prior art must be considered in its entirety, including disclosures that teach away from the claims), *and* MPEP §2143.01 (proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference).

Furthermore, and contrary to the Examiner's analysis, Ishii does not supply Dodd's acknowledged deficiencies.

Ishii discloses a receiver having multiple antennas 21-23 and respective receiver circuits 24-26 for a spectrum spread communication system, and addresses the problem of deterioration in receive quality due to fading by multipass (see Id., col. 4, line 17 though col. 5, line 35; see also Fig. 1). In this regard, Ishii discloses a receiver which includes a signal intensity measuring circuit 27 and a path switching circuit 29 such that "of the outputs of the receiver circuit 24, 25 and 26, one of the largest intensity may be selected" (see Id, col. 5, line 51 through col. 6, line

65). Nowhere does Ishii disclose, teach or suggest delaying at least one of its received signals so that the path difference between the summed signals is at least one chip of the spread spectrum modulation. The passages cited by the Examiner, which are reproduced below in the context of the Ishii disclosure, do not bolster the Examiner's position:

> More particularly, in the space diversity system using the antennas shown in FIG. 6, a signal intensity detection circuit incorporated in the receiver 205 controls the antenna switching unit 204. to thereby select any desired one of the antennas. Thus, when the antenna switching unit 204 is controlled to carry out switching between the antennas at the time when the signal intensity detection circuit detects a decrease in intensity of the receive signal due to fading, reaction time required for the switching is increased because there is a signal delay due to circuits and filters between an end of the antenna and the signal intensity detection circuit, resulting in the receive signal being deteriorated between the detection and the switching. This causes a radio data communication equipment or the like to exhibit a disadvantage that data received between the detection and the switching contain an error. (Id., col. 2, line 62 through col. 3, line 10; see also Id. col. 7, lines 18-24)
>
> In accordance with the present invention, a receiver for a spectrum spread communication system employing a direct spread modulation system is provided. The receiver includes a plurality of receive antennas arranged so as to be spaced from each other at predetermined intervals, a plurality of receiver circuits arranged in correspondence to the receive antennas, respectively, a signal intensity measurement means for sampling a signal of each of the receiver circuits at a speed set to be n (n: an integer) times as large as one chip of a spread code sequence thereof, and a path switching circuit for selecting one of the output signals of the receiver circuits depending on results of measurement of the signal intensity measurement means to feed it to a demodulation circuit. (Id., col. 3, lines 37-50)

Clearly, "signal delay due to circuits and filters between an end of the antenna and the signal intensity detection circuit" and "sampling a signal of each of the receiver circuits at a speed set to be n (n: an integer) times as large as one chip of a spread code sequence thereof", as

described by Ishii, has nothing to do with offsetting signals by at least one chip of the spread spectrum modulation, as required by Applicant's claims 1, 2, 6 and 10.

Likewise, "sampling a signal of each of the receiver circuits at a speed set to be n (n: an integer) times as large as one chip of a spread code sequence thereof", as described by Ishii, has nothing to do with spread spectrum modulating, using different sequences, signals to be transmitted, as required by Applicant's claims 5 and 11.

Therefore, even an unlikely combination of Dodd and Ishii would not result in Applicant's claimed invention.

In summary, Applicant's independent claims 1, 2, 5, 6, 10 and 11, as well as their dependent claims 3, 4, 7-9 and 12-16 (which incorporate all the novel and unobvious features their respective base claims), would not have been obvious from any reasonable, albeit unlikely, combination of Dodd and Ishii.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to **contact the undersigned attorney** at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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